

The Peterborough Amateur Radio Emergency Service

EMERGENCY COMMUNICATIONS PLAN

For Peterborough and Surrounding Area

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1. INTRODUCTION

Amateur radio operators are trained communicators. Their purpose is to transmit written messages given to them by responsible officials. They are neither evaluators nor interpreters of field situations. The Peterborough group of Amateur Radio Emergency Service (ARES) is composed of amateur radio operators licensed by Innovation, Science and Economic Development Canada who have voluntarily registered their capabilities and equipment for public service duty. Members of ARES are equipped with base, mobile and/or hand-held radio transceivers capable of handling local as well as long-distance communications. They are trained through periodic exercises and training sessions to handle emergency communications. Part of being an amateur radio operator working in emergency communications is their knowledge and understanding of their equipment and the workings of the infrastructure needed in radio communications, including the ability to maintain equipment as well as troubleshoot and make repairs and needed improvements to fill the communications needs under potential adverse conditions that may exist in an emergency situation.

Under Federal regulations, amateur radio communications are provided without compensation of any kind. They are not permitted to divulge information received from other services except for assistance in distress communications or if life or property is in danger and other services are not available or overloaded.

The Peterborough ARES group (PARES) uses this Emergency Communications Plan as a guide for operating in an emergency or during simulated exercises. A critique should follow any such operation to update the plan and improve our service.

The Emergency Coordinator (EC) may structure the group and set up special administrative functions and teams to get help from Assistant ECs (AEC), Team Leaders (TL), and Assistant Team Leaders (ATL) to operate effectively.

All amateur radio operators are eligible to volunteer for ARES regardless of affiliations to clubs or organizations.

The following agencies could be served during a communications emergency:

- Peterborough County
 - Contact:
 - Peterborough County Emergency Plan
- City of Peterborough
 - Contact:
 - Emergency Response Plan
- Township of Asphodel- Norwood
 - Contact:
- Township of Cavan Monaghan
 - Contact:
- Township of Douro Dummer
 - Contact:
- Havelock Belmont Methuen
 - Contact:
 - Municipal Emergency Plan

- Township of North Kawartha
 - Contact:
 - Emergency Response Plan
- Township of Otonabee South Monaghan
 - Contact:
 - Municipal Emergency Plan
- Township of Selwyn
 - Contact:
 - Municipal Emergency Plan
- Township of Trent Lakes
 - Contact:
 - Trent Lakes Emergency Plan

Non-Government Agencies:

- Red Cross:
- Salvation Army
- St John's Ambulance

2. PURPOSE OF THIS PLAN

The purpose of this Plan is to provide ARES members and agencies with written information helpful for emergency communication and what to expect from ARES. The Plan includes information on general procedures and strict guidelines used in emergency communications. The Plan also includes general information including a telephone tree and listing of active participants in ARES, information about each ARES installation including contacts at each location and how to access equipment including power, antennas, and radio equipment if stored at these locations.

This Plan is not a training manual but should be used in conjunction with training and exercises. It is required as part of each ARES member's kit and as well on hand at all ARES operating locations.

The appendix includes Net Call-up lists and schedules, Network and communications guidelines, including tables, various lists of prowords, abbreviations and codes used in messaging, Master Forms to be photocopied for use in exercises and emergency deployment, and lists of materials that each member should keep on hand and have available in the event of an emergency (Go Kit).

Amateur radio operators are trained communicators. Their purpose is to transmit written messages. This manual is intended to give each trained volunteer the basic information needed to carry out their assigned task.

Amateur radio operators are discouraged from transmitting personal opinions or observations, unless specifically requested by a responsible official.

The prime objective for the Peterborough ARES group is to furnish communications in the event of a natural or human-created disaster, when regular communications fail or are inadequate. ARES will co-operate with all other community communications systems and supplement or cross-link the services if requested.

3. ACTIVATING THE PLAN

If an emergency exists or one should develop in our local area, all ARES members should start monitoring the Peterborough repeater VE3PBO on 146.625 MHz (-600KHz offset, PL tone 162.2) for information and instructions. If VE3PBO is not functioning, other frequencies list on page 6 will be used.

If the Group Co-ordinator (GC) or Assistant Group Co-ordinator (AGC) receive a request for help in emergency communications, all members will be sent an emergency text, instructing them to go on the active repeater for an ARES Net. This shall be a controlled net under the direction of a Net Control Station (NCS).

If the Telephone System is working, the GC or the person receiving a request will activate the CALLOUT TREE after consulting with the GC or AGC. The telephone message for the members is: "Please check into the (active repeater) ARES NET when en route to the Assembly Points". A SET-UP time of about 2 hours should be expected by the agencies before ARES can provide emergency communications. The CALLOUT TREE activation is as follows: The GC or a delegated person calls will ask individuals to report to Assigned Deployment. Individuals will then wait for further instructions from the GC or AGC.

In the event that the telephone service fails it is advisable that ARES members monitor local broadcast radio stations, using a battery-powered radio, for spot announcements to alert ARES members.

If emergency traffic is directed to areas outside the coverage of the active repeater, the GC or AGC will inform the RAC Section Manager of such requirement and activate Winlink.

VOICE COMMUNICATIONS

If for an unexpected reason VE3PBO is down, the following stations should be monitored for information to obtain alternate instructions to establish an ARES Net:

•	Baltimore	VE3BUY 145.895 MHz Repeater	-600KHz offset, PL tone 162.2
•	Youngs Point	VE3TJR 147.045 MHz Repeater	+600KHz offset, PL tone 162.2
•	SIMPLEX "A"	146.520 MHz	
•	SIMPLEX "B"	146.580 MHz	

For secondary Networks and members with equipment, please be prepared to monitor and when necessary, use these frequencies:

•	Peterborough	VA3PBO 444.575 MHz Repeater	+5MHz offset, PL tone 162.2
•	Baltimore	VE3RTR 145.150 MHz Repeater	-600KHz offset, PL tone 162.2
•	SIMPLEX "C"	446.000 MHz	
•	SIMPLEX "D"	446.100 MHz	

DIGITAL COMMUNICATIONS

WINLINK

If during any emergency internet is not available to transfer data files or message forms, Winlink should be used as an alternative mode of sending email. Standard Message form **IMS Form 213-R** should be used when other specific incident forms are not suitable.

Peterborough VE3KPG-10 145.670 MHz VARA FM

(Digipeater VE3MT-10) 145.670 MHz VARA FM may also be used to digipeat into VE3KPG.)

VARA HF may be used as an alternative to VE3KPG-10 if unavailable.

•	Peterborough	VE3KPG	28.131 MHz	VARA
•	Peterborough	VE3KPG	14.093 MHz	VARA
•	Peterborough	VE3KPG	10.131 MHz	VARA
•	Peterborough	VE3KPG	7.091 MHz	VARA
•	Peterborough	VE3KPG	5.349 MHz	VARA
•	Peterborough	VE3KPG	3.585 MHz	VARA

Any Winlink Hybrid Gateways may also be used if KPG is not available.

[&]quot;Whenever an Emergency has been declared by City Officials, all responding ARES members are covered by insurance. All active PARC or RAC members are protected with \$5 million liability insurance."

4. OPERATING PROCEDURES:

The following are BASIC RULES to be adhered to and applied by all emergency communicators in controlled ARES EMERGENCY NETS.

- 4-1. Stations checking into the ARES net shall use their **full call sign**. NCS will acknowledge the check-in.
- 4-2. **Notify the NCS when leaving the net.** If you are checked into the net, you must check out with NCS when leaving.
- 4-3. **No Stations shall transmit on the net frequency** unless directed to do so by NCS. Exceptions are: when leaving (as in sub. 4-2), or traffic is to be presented.
- 4-4. **All traffic shall be written messages using the formal standard NTS format,** except for brief informal exchanges of verbal information at the discretion of the NCS and between response agency officials. The messages are to be signed by the originating official including his title, who is responsible for the content.
- 4-5. **The operator of the originating station shall generate the preamble of the message** and together with the official signatory determine the **precedence** of the message. All times shall be in UTC for NTS traffic. Local times can be used for local nets at the discretion of the NCS with the approval of the EC. The UTC clock goes from 0000 hrs till 2359 hrs. UTC = EST + 5 hours, when we are on Eastern Standard Time. UTC = EDT + 4 hours, when we are on Daylight Saving Time.
- 4-6. **All formal messages are made in duplicate**. The original stays with the operator. The copy is returned to the originating official after the message is marked as to what station responds and the time it was transmitted.
- 4-7. **At the receiving station, the messages are also made in duplicate.** The original goes to the addressee and the copy stays with the communications operator.
- 4-8. The precedence in the preamble of the Radiogram regulates the priority of traffic flow. No lower priority messages shall be passed if higher priority traffic is pending. The highest order of priority is emergency followed by priority, welfare and the lowest is routine.
- 4-9. **Each operator shall keep a log of all communications** carried out by him during the emergency. The log should have his name, the start and finish time and station, and with whom in contact. Particulars of the communication should also be on the log. A VOX-operated tape recorder would be a great asset.
- 4-10. **Amateurs are not to transmit personal opinions or observations**, unless specifically requested by a responsible Official.

NO FATALITIES ARE TO BE REPORTED BY AMATEUR RADIO. This is the responsibility of Municipal or Provincial authorities.

5. ARES INSTALLATIONS

Some radio stations are permanently located at various agencies and strategic locations. The following pages provide details for each location.

5.1 PETERBOROUGH CITY EMERGENCY OPERATIONS CENTRE

Tactical call sign: To be assigned during an Emergency

Location: Peterborough Fire Services HQ

210 Sherbrooke Street

Contact person: Jodi Chittick-DeNoble

Community Emergency Manager Co-ordinator – CEMC

(705) 742-7777 ext. 2722

Setup Information:

The ARES team reporting to the Fire Services Headquarters enters the building through the Main door from Sherbrooke Street. The Radio Emergency Communications desk shall be set up on the west wall of the class room one floor up. The stairs are to the right of the Main Entrance.

The ANTENNA is a Ringo Ranger II and is mounted on the North wall at the East corner with a standoff pipe fastened to the wall. The feedline is a 3/8" Heliax in one length from the antenna to a point above the ceiling tile (A) in the Exercise Room. There it is connected to a 16-foot length of RG-58/U which crosses over the wall and is coiled above the ceiling tiles (4) in the Classroom. For access, push tile (3) up carefully. The RG58U terminates in a PL-259 UHF connector and a PL-259-to-BNC adapter. POWER is available from one Dual-Outlet (117 Volt, 60 Hz) on the west wall. This outlet also supplies emergency power.

5.2 ALTERNATE PETERBOROUGH CITY EMERGENCY OPERATIONS CENTRE

Tactical Call sign: To be assigned during an Emergency

Location: Peterborough Fire Station #3

839 Clonsilla Ave., K9J 5Z3

Contact person: Jodi Chittick-DeNoble

Community Emergency Manager Co-ordinator - CEMC

(705) 742-7777 ext. 2722

Setup Information: to follow.

Equipment: Yaesu FT-8900 quad-band mobile transceiver

ARES team. ARES Personnel Team to be directed by NCS as required.

5.3 PETERBOROUGH COUNTY OPERATIONS CENTRE

Tactical Call sign: To be assigned during an Emergency

Location: Peterborough County Court House

470 Water Street, K9H 3M3

Contact person: David Justnski

Supervisor, Facilities and Maintenance

(705) ???-???? ext. 2722

Setup Information: to follow.

Equipment: Yaesu FT-8900 quad-band mobile transceiver

ARES team: ARES Personnel Team to be directed by NCS as required.

5.2 ALTERNATE PETERBOROUGH COUNTY OPERATIONS CENTRE

Tactical Call sign: To be assigned during an Emergency

Location: Peterborough County Base, Paramedics Headquarters

310 Armour Rd. K9H 1Y6

Contact person: Craig Jones

Emergency Management County of Peterborough

(???) ???-?????

Setup Information: to follow.

Equipment: Yaesu FT-8900 quad-band mobile transceiver

ARES team: ARES Personnel Team to be directed by NCS as required.

APPENDICES

APPENDIX A: PROWORDS FOR VOICE COMMUNICATIONS

AFFIRMATIVE - "Yes" or "Permission granted" (NO Q-code please)

ALL AFTER - "Say again all your transmission after ----"
ALL BEFORE - "Say again all your transmission before ----"

BREAK - "I stop my transmission for your acknowledgement or request for retransmission

of my text so far"

CLEAR - "QSO finished - open to further contact"
CORRECT - "You are correct" or "That is correct"

DISREGARD - "This transmission is in error - disregard it"

FIGURE(S) - "The following text is a NUMERAL" or (are numerals)

FROM - "This is station ----(call sign)"

GO AHEAD - "Begin sending" or "Request granted"
INCORRECT - "You are incorrect. Correct version is ----"

INITIAL - "A single letter character follows"

I SPELL - "I will spell the next word"
NEGATIVE - "Not received" or "No"

OUT - "End of transmission. No response expected"

OVER - "End of transmission. You go ahead"

READ BACK - "Repeat entire message"

ROGER - "Received message and understood" (does not mean yes)

SAY AGAIN - "Repeat last transmission"
THIS IS - "This is --- (call sign)"

VERIFY - "Verify message or part of it" when read back to sender WAIT 3 - "I must pause 3 minutes" WAIT - "Pause for a moment"

WORD AFTER - "Repeat the word after ----" WORD BEFORE- "Repeat the word before ----"

WORD TWICE - "I will (or: Please) transmit each word twice"

APPENDIX B: ITU PHONETIC ALPHABET

A. ALPHA J. JULIET S. SIERRA B. BRAVO K. KILO T. TANGO C. CHARLIE L. LIMA U. UNIFORM D. DELTA M. MIKE V. VICTOR E. ECHO N. NOVEMBER W. WHISKY F. FOXTROT O. OSCAR X. X-RAY G. GOLF P. PAPA Y. YANKEE H. HOTEL Q. QUEBEC Z. **ZULU** I. INDIA R. ROMEO

APPENDIX C: PERSONAL CHECKLIST FOR ARES. OPERATION

- 1. ARES personnel.
 - a. ARES identification card. (Armband, Hat, Vest with patch?)
 - b. Photocopy of station license.
 - c. Drivers license.
 - d. ARES Emergency communications plan.
 - e. Road maps of Peterborough County and Ontario.
- 2. Radio Gear
 - a. 2 meter transceiver. Mobile or hand-held.
 - b. Power supply for above or spare batteries for hand-held.
 - c. Microphone and headphones plus spares.
 - d. Antenna and mounting. 300 Ohm J-pole is a good choice.
 - e. AM/FM receiver (battery-powered).
 - f. Adapter for BNC to UHF and extra coaxial cable.
- 3. Tools
 - a. Pen, pencils, eraser, note paper.
 - b. Carbon paper (for duplicating messages)
 - c. Log book and clipboard.
 - d. NTS standard RADIOGRAM forms. (Available from EC)
 - e. AMATEUR MESSAGE FORM, the red card (FSD-218) or the new PUBLIC SERVICE COMMUNICATIONS MANUAL by KY1T.
 - f. ARRL NUMBERED RADIOGRAMS, the green sheet. (FSD-3)
 - g. Flashlight, spare batteries, can opener, matches, candles.
 - h. Small tool set. (Screwdrivers and pliers, etc.)
- 4. Personal Welfare
 - a. Snacks, chocolate, soft drinks or WATER BOTTLE.
 - b. Aspirin and personal medicine.
 - c. Foul-weather clothing, for both wet and cold.
 - d. Wristwatch or alarm clock.
 - e. Money, including quarters for telephone.
 - f. Coffee mug, cleaning kit. Toilet paper.
- 5. Extended duration tour
 - a. Sleeping bag
 - b. Large container of drinking water.
 - c. Fresh food and canned supply in a cooler.
 - d. Mess kit, first aid kit, toiletry kit.
 - e. Extra sets of underwear and socks.
 - f. Extended set of tools, V.O.M. etc. for repairs.

Note: It is recommended that all ARES members develop the habit of keeping their vehicle's fuel tank more than half full. If municipal powers fail, most service stations will not be able to pump gasoline.

APPENDIX D: PARES CALLOUT TREE

Please download latest password protected Callout Tree pdf from https://www.qsl.net/pares/callout.pdf

Please contact John deLagran VE3VL to obtain password.

APPENDIX E: FORMS

The following pages are forms and their respective information on how to use them.

Use these pages as masters to photocopy for event use. Be sure to have many copies of this on hand at all times as it's unlikely that there will be a photocopier available at the area to where you are deployed. Note that some are intended to be printed as a 2-sided form. Second side is usually a key for use in filling out or reading the form, such as code definitions.

VOICE COMMUNICATIONS

Form 1. Peterborough Amateur Radio Emergency service radiogram *This is a 2-sided form.*https://www.qsl.net/pares/radiogram.pdf

DIGITAL COMMUNICATIONS

Form 1. Standard Message Form IMS 213-R

Form 2. Any specific incident form listed in Winlink Templates.



PETERBOROUGH AMATEUR RADIO EMERGENCY SERVICE RADIOGRAM

TGENCY SERV			V	IA AMATEUR	RADIO			
Number	Precedence	нх	Station of Origin	Check	Place of Orig	gin	Time Filed UTC	Date M/D/Y
To Nam	e:				Phone ()	<u>-</u>	
Street: _					City:			
Province	ə:	Posta	al Code:					
Message Tex	a t							
								5
	·							10
								15
	·							20
								25
This radio n	message was re	eceived By	<u></u>			Notes:		
Station Ca	all:	_Name:						
Address:								
City:		Pı	rov:Po	ostal Code:_				
Phone()		Signature :					
Recived From	lame		Call	7	Time Date			
Sent To	Name		Call	7	Time Date			
	handled solely for the pl	leasure of operatir	shown above, handled this mesing, a "Ham" Operator can not a	accept compensation.	A return	Radio amate	mateur Radio may be obtaineurs of Canada head office	

RADIOGRAM COMPONENTS:

Number: Your message number

<u>Precedence</u>: "R" for ROUTINE unless it is an emergency! Routine, **H**ealth & Welfare, **P**riority or **E**mergency

Handling Instruction(s) H X _: (* = Most commonly used)

- **A** = Collect landline delivery authorized by addressee within X miles (no number, authorization is unlimited).
- **B** = Cancel message if not delivered within X hours of filing time; service originating station
- **C** * = Report date and time of delivery (TOD) to originating station.
- D = Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.
- **E** = Delivering station get reply from addresses, originate message back.
- **F** = Hold delivery until....(date). (i.e. F5 holds until the "5th")
- **G** * =Delivery by mail or landline toll call not required. If expense involved, cancel message and service originating station.

Check: Word count for message body. If ARL text is used, precede count with ARL (i.e., ARL22).

Station of origin: Ham who formats & submits it to NTS.

Place of Origin: Where message originates.

Time Filed: In 24 hr local time

<u>Date:</u> Date message was written (M/D/Y) ex. **Dec. 21 2012**.

<u>To:</u> Put name and amateur call sign (if applicable); Street address; City; State/province & Postal code / ZIP; Telephone including area code. Postal code or ZIP is required for NTS messages sent digitally via Packet, etc.

www.rac.ca or phone 1-877-273-8304

Body: Text goes here, maximum 5 words per line and 25 words total. A telephone number with area code counts as 3 words (705 555 1212). Always include area code. ARL numbered texts are spelled out (i.e., ARL FORTY SIX). "73" is written as 73, counts as one word.

<u>Signature</u>: This is the signature of the person who wrote the message, may differ from the Originator. If a ham operator, include name and call sign. If not a ham, include name and phone number (including area code).

<u>REC'D</u>: Operator call sign message was rec'd from, time and date. <u>SENT</u>: Operator call sign sent to, time and date.

If receiver is last stop and delivers the message, note to whom delivered, how, and time and date.

ARL NUMBERED RADIOGRAMS

Standardized ARL numbered messages have been established for some of the more common texts sent during emergencies and holiday seasons. When this common text can be used, an ARL number is substituted for the text. Then the delivering station reads the actual text to the address, not the ARL number. The letters ARL are inserted in the preamble in the Check and in the text before spelled out numbers, from list on the reverse side. Note that some ARL texts require the insertion of numerals or words.

Example: YOUR FAMILY IN BEAVERTON ARL SIXTY ANIVERSARY ARL FIFTY SEVEN
Group One -- For Possible "Relief and Emergency" Use

OME					
ONE	Everyone safe here. Please don't worry.	FOURTEEN	Situation here becoming critical. Losses and damage from increasing.		
TWO	Coming home as soon as possible.	FIFTEEN	Please advise your condition and what help is needed.		
THREE	Am in hospital. Receiving excellent care and recovering fine.	SIXTEEN	Property damage very severe in this area.		
FOUR	Only slight property damage here. Do not be concerned about disaster reports.	SEVENTEEN	REACT communications services also available. Establish REACT communication withon channel		
FIVE	Am moving to new location. Send no further mail or communication. Will inform you of new address when relocated.	EIGHTEEN	Please contact me as soon as possible at		
SIX	Will contact you as soon as possible.	NINETEEN	Request health and welfare report on (State name, address and telephone number.)		
SEVEN	Please reply by Amateur Radio through the amateur delivering this message. This is a free public service	TWENTY	Temporarily stranded. Will need some assistance.		
EIGHT	Need additional mobile or portable equipment for immediate emergency use.	TWENTY ONE	Search and Rescue assistance is needed by local authorities here. Advise availability.		
NINE	Additional radio operators needed to assist with emergency at this location.	TWENTY TWO	Need accurate information on the extent and type of conditions now existing at your location. Please furnish this information and reply without delay		
TEN	Please contact Advise to standby and provide further emergency information, instructions or assistance	TWENTY THREE	Report at once the accessibility and best way to reach your location.		
ELEVEN	Establish Amateur Radio emergency communications with on MHz.	TWENTY FOUR	Evacuation of residents from this area urgently needed. Advise plans for help.		
TWELVE	Anxious to hear from you. No word in some time. Please contact me as soon as possible.	TWENTY FIVE	Furnish as soon as possible the weather conditions at your location.		
THIRTEEN	Medical emergency situation exits here.	TWENTY SIX	Help and care for evacuation of sick and injured from this location needed at once.		
	Group Two R	outine messa	pes		
FORTY SIX	Greetings on your birthday and best wishes for many more to come.	FIFTY NINE	Congratulations on the new arrival. Hope mother and child are well.		
FIFTY	Greetings by Amateur Radio.	*SIXTY	Wishing you the best of everything on		
FIFTY ONE	Greetings by Amateur Radio. This message is sent as a free public service by ham radio operators at Am having a wonderful time.	SIXTY ONE	Wishing you a very Merry Christmas and a Happy New Year.		
FIFTY TWO	Really enjoyed being with you. Looking forward to getting together again.	*SIXTY TWO	Greetings and best wishes to you for a pleasant holiday season.		
FIFTY THREE	Received your It's appreciated; many thanks.	SIXTY THREE	Victory or defeat, our best wishes are with you. Hope you win.		
FIFTY FOUR	Many thanks for your good wishes.	SIXTY FOUR	Arrived safely at		
FIFTY FIVE	Good news is always welcome. Very delighted to hear about yours.	SIXTY FIVE	Arriving on Please arrange to meet me there.		
FIFTY SIX	Congratulations on your, a most worthy and deserved achievement.	SIXTY SIX	DX QSLs are on hand for you at the QSL Bureau. Send self addressed envelopes.		
FIFTY SEVEN	Wish we could be together	SIXTY SEVEN	Your message number undeliverable because of Please advise.		
FIFTY EIGHT	Have a wonderful time. Let us know when you return.	SIXTY EIGHT	Sorry to hear you are ill. Best wishes for a speedy recovery.		
		SIXTY NINE	Welcome to the We are glad to have you with us and hope you will enjoy the fun and		
			fellowship of the organization.		